

## WHAT IS CLAIMED IS:

1. A printing apparatus which divides a printing area in a scanning direction on a printing medium into a plurality of regions and has a print buffer for  
5 storing column data corresponding to the divided regions in order to print by scanning a printhead on the printing medium, comprising:

input means for sequentially inputting block data corresponding to the divided regions;

10 acquisition means for acquiring N-bit raster data from the block data input to said input means;

conversion means for converting the raster data into column data;

transfer means for sequentially transferring the  
15 raster data acquired by said acquisition means to said conversion means;

second transfer means for sequentially transferring N column data converted by said conversion means to the print buffer;

20 storage means for storing the N column data transferred from said second transfer means in the divided regions of the print buffer; and

control means for executing transfer processing of said transfer means, transfer processing of said  
25 second transfer means, and conversion processing of said conversion means in synchronism with a predetermined signal.

2. The apparatus according to claim 1, wherein the block data contains a plurality of color component data, and the divided region is further divided into second regions in correspondence with the number of color components.

3. The apparatus according to claim 2, wherein the block data contains a code representing a data delimiter between first color component data and second color component data.

4. The apparatus according to claim 3, wherein said acquisition means outputs a second predetermined signal to said conversion means when the code is determined.

5. The apparatus according to claim 1, wherein said conversion means comprises holding means for holding N raster data transferred from said transfer means, and performs longitudinal/lateral conversion processing after said holding means holds the N raster data.

6. The apparatus according to claim 4, wherein said conversion means comprises holding means for holding N raster data transferred from said transfer means, and when the second predetermined signal is input while said holding means holds M ( $M < N$ ) raster data, sets (N-M) "0" data in said holding means and then performs longitudinal/lateral conversion processing.

7. A printing apparatus which divides a printing area in a scanning direction on a printing medium into a plurality of regions and has a print buffer for

storing column data in the divided regions in order to print by scanning a printhead on the printing medium, comprising:

reception means for sequentially inputting block  
5 data corresponding to the divided regions;

determination means for determining a color change code contained in the block data input to said reception means;

decompression means for decompressing, into  
10 raster data, compressed data contained in the block data input to said reception means;

conversion means for converting the raster data into column data; and

means for storing in the print buffer the column  
15 data converted by said conversion means,

wherein the divided region is further divided for each color, and the column data converted by said conversion means is stored in the region divided for each color on the basis of a determination result of  
20 said determination means.

8. A printer driver executable in a host computer which outputs printing data to a printing apparatus in order to print by scanning a printhead on a printing medium, comprising:

25 a generation step of generating a plurality of block data corresponding to divided regions obtained by dividing a printing area by one scanning on the

printing medium into the plurality of regions in a scanning direction; and

an output step of sequentially outputting the block data generated in the generation step in  
5 correspondence with a direction in which the printhead scans.

9. The driver according to claim 8, wherein the block data contains first color data, second color data, and a color change code between the first color  
10 data and the second color data.

10. The driver according to claim 9, further comprising a compression step of compressing the first color data and the second color data by a predetermined compression method.

15